

LARVAE OF ALDERFLY (MEGALOPTERA: SIALIDAE) FROM PITCHER PLANT¹

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Leaves of the eastern pitcher plant (*Sarracenia purpurea*) create a suitable habitat for a few species of dipteran larvae, including *Wyeomyia smithii* (Coquillett) (Culicidae), *Metriocnemus knabi* Coquillett (Chironomidae), and *Blaesoxipha fletcheri* (Aldrich) (Sarcophagidae). The digestive fluids of these insectivorous plants restrict this habitat, for the most part, to these specially adapted insects. However, a few other insect species have occasionally been found alive in this leaf-contained aquatic habitat (Jones, 1920; D. Fish, Fordham Univ., person. commun.). During a 2-year survey of the arthropod fauna of *S. purpurea* in a southern New Jersey bog (Salem Co.), 2 sialid (Megaloptera: Sialidae) larvae were discovered. The first was found in a large, water-filled leaf (pH=6.8) on April 25, 1980. The second was collected May 30, 1980 from a smaller leaf (pH=7.1) approximately 40 m from the first. Both leaves were from plants situated on moss-covered tussocks approximately 20 cm above the surface water of the bog. These leaves had been produced during the previous growing season (1979) and contained larvae of both *W. smithii* and *M. knabi*.

The first sialid larva was preserved in 70% EtOH and sent to Dr. Lawrence Canterbury (U. of Cincinnati) who identified it as *Sialis joppa*. By comparison the second larva was determined to be the same species. Both specimens were in the pre-pupal stage and may have entered the pitcher plant in search of a pupation site. Normal pupation occurs in soil a short distance from the water. The preferred larval habitat of *S. joppa* are small, shallow streams (Canterbury, person. commun.), yet no larvae were ever recovered from the small stream (\bar{X} pH=6.1) flowing through the bog.

Sialis joppa has not been recorded from New Jersey, although it has been collected nearby in Delaware and Pennsylvania (Tarter, et al., 1978). Therefore this report not only records another insect using the pitcher plant habitat, but serves as a new state record for *S. joppa*.

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LITERATURE CITED

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